

ABSTRACT

A method for quickly and efficiently locating objects, such as images having fixed aspect ratios, within a predefined space, such as a printed page, is provided. The method comprises generating a binary tree containing a first image. The system
5 generates a second tree, where the second tree modifies the first tree by inserting a second image at a location or position on the first tree. This iterative process of inserting images one at a time continues until the system generates a final tree including all images. In each iteration, the position in the binary tree where the system inserts each subsequent image can be either a leaf or a node. The system generates a series of candidate trees,
10 one for each subsequent image inserted into each and every location in the preceding tree, and the candidate tree having a highest score indicates the selected location for the subsequent image and the new baseline, preferred binary tree.